

# Fig.2(a)

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| EBV  | MTRRRPAPPATTVOPTATROO  |
|------|--|
| CMV  | MESRIWCLVVCVNLCIVCUGAAVSSSTSHATSSTHNGSHTSRTTSAQTRSVYSOHVTSSEAVSH   |
| HSV  | MRQGAARGCRWFVVWALLGLTLGVLYASAAPSSPGTPGVAAATQAANGGPATPAPPAPGPAPTGDTKPKK   |
| אַנו |  |
| CMV  | : : : : : : : : : : : : : : : : : : :  |
| IISV | NKKPKNPPPPRPAGDNATVAAGHATLRFHLRDIKAENTDANFYVCPPPTGATVVQFEOPRRCPTR-PEGO   |
| > 0  | NHTEGII WY EK DNII PYSEKVRSYTKIVTNIL I YNG WYADSVTNRHE EK FSV DSYET-DOMDT I Y QCYNA  |
| , E  | I : : : : : : : : : : : : : : : : : : :  |
| H V  | DECEMBER OF THE STATE OF THE ST |
|      |  |
| EBV  | VKMTKDGLTRV YV DRDGV NITV NLK PTGGLANGVRRY AS OT ELY DA PG WLIWTYRTRTTV NCL I TDMMAK   |
| CMC  | YSRV IGGTV FV AYIIRDS YENKT MOLI PDD YS NTH STRYV TV KDOWH SRG STWLYRET CNLNCMLT ITTAR   |
| HSV  | : ::: : AKYVRNNLETTAFHROOHETUMELK-PANAATRTSRGWHTTOLKYNPSRVEAFHRYGTTVNCIVEEVOAR   |

# Fig.2(b)

| V SNSPFDFFVTTTGOTVEMSPFYDGK-NKETFHERADSFHVRTNYKIVDYDNRGTNPOGERRAFLDK : :: : : : : : : : : : : : : : : : : : | SVYPYD | V GTYTLSWKLE-NRTAYCPLOHWOTEDSTIATETGKSIHFVTDEGTSSFVTNTTVGIELPDAF-KCIEEOV | ADSV ISWDIQDE | FTVAMD |
|---|--------|--|---------------|--------|
| EBV<br>CMV  | ИSV    | EBV  | CMC           | ЯSV    |

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| EBV  | ARGSTPAAVLRRRRDAGNATTPVPPTAPGKSLGTLNNPATVQIOFAYDSLRRQINRMLGDLARAWCLEQ                 |
|------|---|
| CMV  | SDNNTTHLSSMESVHNLVYAOLOFTYDTLRGYINRALAOIAEAWCVDO                                      |
| H SV | ANASVERIKTTSSIEFARLQFTYNHIORHVNDMLGRVAIAWCELO   |
| EBV  | KRONMV LRELTKINPTTV MSSIYGKAV A AKRLG DV I SV SOCV PV NOATV TLRKSMRV PGSETMCYSRPLV    |
| CMV  | RRTLEV FKELSKINPSAILSAIYNKPIAARFMGDVLGLASCVTINOTSVKV LRDMNVKESPGRCYSRPVV              |
| HSV  | NHELTLWNEARKLNPNAIASATV GRRVSARHLGDV MAVSTCV PVAADNV IV QNSMR ISSRPGA CYSRPLV         |
| EBV  | SFSFINDTKTYEGOLGTDNEIFLTKKMTEV CQATSQYYFQSGNEIHVYNDYHHFKTIELDGIATLOTFIS               |
| CMV  | I FNFANSSYV QYGOLGEDNE I LLGNHRTEECOLPSLKIFI AGNSAYEYV DYLFKRMIDLSSI STV DSMIA        |
| HSV  | SFRYEDOGPLV EGOLGENNEL RLTRDA I EPCTV GHRRYFT FGGGYV Y FE EYAYSHOL SRAD I TTV STF I D |
| EB V | LNTSLIENIDFASLELYSRDEQRASNVFDLFGIFREYNFQAQNIAGLRK DLDNAVSNGRNOFVDGLGELH               |
| CMV  | LDIDPLENTDFRVLELYSOKELRSSNYFDLEEIMREFNSYKORVK YVEDKVVDDPLPPYLKGLDDLM                  |
| NSII | LNITMLEDHEFVPLEVYTRHEIKUSGLLDYTEVORRNQLHDLRFADIDTVIHADANAAMFAGLGAFF                   |
|      |   |

# Fig.2(d)

| EBV    | DSLGSVGOSITNLVSTVGGLFSSLVSGFISFFKNPFGGHLILVLVAGVVILVISLTRRTROMSQOPVQHL            |
|--------|---|
| CMV    | :<br>AAGKAVGVAIGAV(   |
| II S V | EGMGDLGRAVGKVVMGIVGGVVSAVSGVSSFMSNPFGALAVGLLVLAGLAAAFFAFRYVMRLQSNPMKAL            |
| EBV    | YPGI-DELAQQHASGEGPGINPISKTELQ-AIMLALHEQNQEOKRAAORAAGPSVASRALOAARDRF               |
| CMV    | : : : : EPYLV SADGTTV TSGSTKDTSLOAPPSYEESV YNSGRKGPGPASSDASTAAPPYTNEQAYOMLLALARLD |
| HSV    | : : : : : : : : : : : : : : : : : : :   |

EBV PGLRRRYHDPETAAALLGEA-ETEF

CMV AEGRAGONGTDSLDGGTGTQDKGOKPNLLDRLRHRKNGYRHLKOSDEEENV

HSV MV MRKRRNTNYTQV PNKDGDADEDDL

## Fig. 3(a)

1 CCGCGCCGTTCGGGTGTCTTCAGGGAGCCGCACCCACCTTGGCTGCCTAAGTCCGTCATCCCTCCTCCTCGACTGCGGGTTTCCCGGAGGTCCGCGACACGACAACCACGAC

M E S R I W C L V V C V N L C I V C L G A A V S S S S T I S COCCTC OF STANDED CONTROCT OF STANDED CONTROCT

ETIYNTTLKYGDVVGVNTTKYPYRVCSKAOGTDLIRFE

481 AICAICIGCACCICGAIGAAGCCTAICAATGAAGACTIGGAIGAGGGCAICAIGGIGGICTACAAGGCGAACAICGIGGCGCACCTITAAGGIACGGGITTACAAAGGTITTIGACG II C T S M K P I N E D L D E G I M V V Y K R N I V A H T F K V R V Y O K V L T

F R R S Y A Y I Y T T Y L L G S N T F Y V A P P W F I II II N K F A O C Y S. S 601 TITCGTCGTAGCTACGCTTACACCACTTATCTGCTGGGGCAGTAACGGAATACGTGGCGCCTCCTATGTGGGAATTCATCACATCAACATTGCTCAATGCTACATCC

841 GTCAAGGATCÁGIGGCACAGCCGCGGCAGCCTGTCTATCGIGAGACCTGTAATCTGAACTGTATGCTGACCATCACTACGGCGCTCCAAGTATCCTTATCATTTTTGCAACT V K D Q W R S R G S T M L Y R E T C N L N C M L T I T T A R S K Y P Y R F F A

961 ICCACGGGTGATGTGGTTTACATTTCTCCTTTCTACAACGGAACCAATCGCAATGCCAGCTACTTTGGACAAACGCCGACAAGTTTTCATTTTCCCGAACTACACACGATCGTTTCCA S I C D V V Y I S P F Y N C I N R N A S Y F G F N A D K F F I F P N Y I V S

### Fia.3(b)

1081 TITEGAAGACCCAACGCIGCGCAGAAACCCATAGGITGGTGGTTTTTTTGGAACGTGCCGACTTTTGGGATATACAGGACGAGAAGAATGTCACCTGCCAGCTCACCTTC F G R P N A A P E T 11 R L V A F L E R A D S V 1 S W D 1 O D E K N V T C O I. T

LDCYRDEAINKLOOIFNTSYNOTYEKYGNVSVFETSGGI

1681 CAACGGCGCACCCTAGAGGTCTTCAAGGAACTCAGCAACTCAACCGTCAGCCATTCTCGGCCATTACAACAAACCGATTGCCGCGCGTTTCATGGGTGTCTTGGGCTGGCCTGGCC ORRTL EVFKELSKINPS AILS AIYNKPI AARFHG DVL G L

V O Y G O L G E D N E 1 L L G N 11 R T E E C O L P S L K 1 F 1 A G N S A Y E Y V 1921 GTGCAGTACGGTCAACTGGGGACAACGAAATCCTGTTGGGCAACCACCGCAATGTTCAGCTTCCCAGCCTCAAGATCTTCATCGCCGGGAACTCGGCCTACGAGTACGTG D Y L F K R N I D L S S I S T V D S M I A I. D I D P L E N T D F R V L E L Y S O 2041 GACTACCTCTCAAACCTTCAAACCTTGAACTTTACTCGCAG

K E L R S S N V F D L E E I M R E F N S Y K O R V K Y V E D K V V D P L, F P Y L 2161 AAAGAGCTGCGTTCCAGCAACGTTTTTGACCTCGAAAAGATCATGCGCGAATTCAACTCGTACAAGGTAAAGTACGTGGAGGACAAGGTAGTCGACCGCTACCGCTACCTC

K G L D D 1, M S G L G A A G K A V G V A I G A V G G G A V A S V V E G V A T F L K 2281 aaggetetggacgacgtcatgaggggcetgggcgcgggggaaaaggccgttggcgtagccatttggcgtaggcggtgggcgtgggtgaaggcgttgcgttcttcaaa

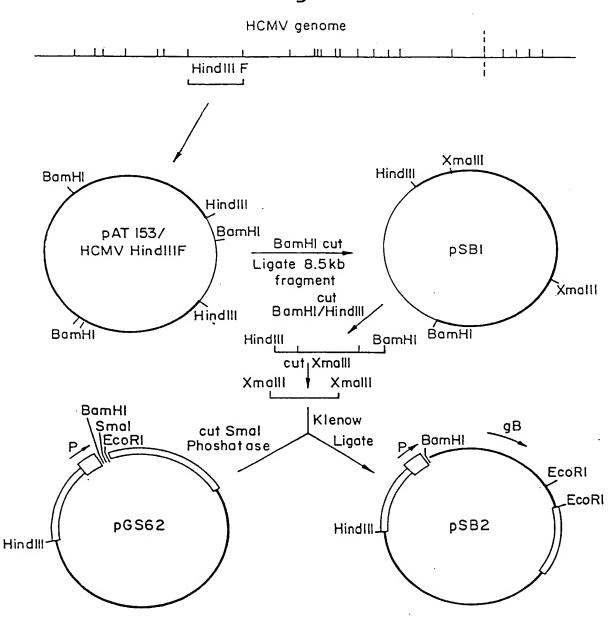
N P F G A F T I I L V A I A V V I I T Y L I Y T R O R R I, C T O P L O N L F P Y 101 AACCCCTTCGGAGCCTTCACCAGCCGTCTGGGAACCTCTTTCCCTAT

L V S A D G T T V T S G S T K D T S L Q A P P S Y E F. S V Y N S G R K G P G P P 2521 CTGGTGTCCGCCGACGACGACGACGACGAGGACGAAGACACGTGGTTACAGGCTCCGCCTTCCTACGAGAAAGTGTTTATAATTCTGGTCGCAAAGGACCGGGACCACCG

2881 AGGAGGAAAAAAAAAAAAAAAAAAAAATATTGACACAGAGACTTGTGATATACGGGGTTAAACTGGATATCTAGGTGCTGCATGTATTTTCTTTGTGATTTTGCTTCGTAÅGCTGTCA

1121 6660

Fig.4.



### Fig.5(a)

- | CGCAGAGCGTTCCCCGTCGAATCAGCGTCGTCCCCACGCCCGGACGGCATGGCTTACCCG
- 61 CGTGTCCCCTCTTCTTCGCAGCGGCCAATGACATCGTATTAAATAGACAGAGACGC
- 121 GACTTTTGTAACCCGTAGCGCCACACCCGGGTGCCCCTTCCTGGGATCCTTTCTCTCTT
- 181 CTCTCGGGTGTAACGCCAACCACCTGGATCACGCCGCTGAACCCAGCGGCGCAGCC
- L P S Q R Y G A D A A S E A L D P H A F 301 CCTACCTTCGCAACGATATGGCGCGGGACGCCGCATCCGAAGCGCTGGACCCTCACGCATT
- C T Y N S S L R N S T V V R E N A I S F 421 GTGCACCTACAACAGCAGCCTCCGTAACAGCACGGTCGTCAGGGAAAACGCCATCAGTTT
- N F F Q S Y N Q Y Y V F H M P R C L F A 481 CAACTTTTCCAAAGCTATAATCAATACTATGTATTCCATATGCCTCGATGTCTTTTTGC
- G P L A E Q F L N Q V D L T E T L E R Y 541 GGGTCCTCTGGCGGAGCAGTTCTGAACCAGGTAGATCTGACCGAAACCCTAGAAAGATA
- Q Q R L N T Y A L V S K D L A S Y R S F 601 CCAACAGAGACTTAACACCTACGCATTGGTATCCAAAGACCTGGCCAGCTACCGATCTTT
- S Q Q L K A Q D S L G Q Q P T T V P P P 661 TTCGCAGCAGCTGAAGGCAAGACAGCCTGGGTCAGCAGCCCACCACCGTGCCACCGCC
- I D L S I P H V W M P P Q T T P H D W K
  721 CATTGATCTGTCAATACCTCACGGTTTGGATGCCACCCCCAAACCACTCCACACGACTGGAA
- G S H T T S G L H R P H F  $\overline{\text{N}}$  Q T C I L F-781 GGGATCGCACACCTCGGGACTACATCGGCCACACTTTAACCAGACCTGTATCCTCTT
- D G H D L L F S T V T P C L H Q G F Y L 841 TGATGGACACGATCTGCTTTCAGCACCGTTACGCCCTGTCTGCACCAGGGCTTTTACCT
- M D E L R Y V K I T L T E D F F V V T V 901 CATGGACGAACTACGTTACAGTTACACACTGACCGAGGACTTCTTCGTAGTTACGGT
- S I D D D T P M L L I F G H L P R V L F 961 ATCTATAGACGACGACACCCATGCTGCTTATCTTCGGTCATCTTCCACGCGTACTCTT

### Fig. 5(b)

K A P Y Q R D N F I L R Q T E K H E L L 1021 CAAAGCGCCCTATCAACGCGACAACTTATACTACGACAAACTGAAAAACACGAGCTCCT V L V K K A Q L N R H S Y L K D S . D F L 1081 GGTACTAGTTAAGAAAGCTCAACTAAACCGTCACTCCTATCTCAAAGACTCGGACTTTCT D A A L D F N Y L D L S A L L R N S F H 1141 CGACGCCGCACTCGACTTCAACTACCTGGACCTCAGCGCACTGTTACGTAACAGCTTTCA R Y A V D V L K S G R C Q M L D R R T V 1201 CCGTTACGCTGTAGACGTACTCAAAAGCGGTCGATGTCAAATGTTGGACCGCCGCACGGT E M A F A Y A L A L F A A A R Q E E A G 1261 AGAAATGGCCTTCGCCTACGCATTAGCACTGTTCGCGGCAGCCCGACAAGAAGAGGCCGG T E I S I P R A L D R Q A A L L Q I Q E 1321 CACCGAAATCTCCATCCCACGAGCCCTAGACCGCCAGGCCGCACTCTTACAAATACAAGA F M I T C L S Q T P P R T T L L Y P T 1381 ATTTATGATCACCTGCCTCTCACAAACACCACCACGCACCACATTGCTGCTATATCCCAC A V D L A K R A L W T P D Q I T D I T S 1441 AGCCGTGGACCTGGCCAAACGAGCCCTCTGGACGCCGGACCAGATCACCAG LVRLVYILSKQNQQHLIPQW 1501 CCTCGTACGCCTGGTCTACATACTTTCTAAACAGAATCAGCAACATCTCATTCCCCAGTG ALRQIADFALQLHKTHLASF 1561 GGCACTACGACAGATCGCCGACTTTGCCCTACAATTACACAAAACGCACCTGGCCTCTTT S A F A R Q E L Y L M G S L V H S M L 1621 TCTTTCAGCCTTCGCGCCCAAGAACTCTACCTCATGGGCAGCCTCGTCCACTCCATGTT V H T T E R R E I F I V E T G L C S L A 1681 GGTACATACGACGGAGAGACGCGAAATCTTCATCGTAGAAACGGGCCTCTGTTCATTGGC ELSHFTQLLAHРННЕУLSD.L 1741 CGAGCTATCACACTTTACGCAGTTGCTAGCTCATCCGCACCACGAATACCTCAGCGACCT Y T P C S S S G R R D H S L E R L T R L F P D A T V P A T V P A A L S I L S T M 1861 CTTCCCGATGCCACCGTTCCTGCTACCGTTCCCGCCCCCTCTCCATCCTATCTACCAT Q P S T L E T F P D L F C L P L G E S F 1921 GCAACCAAGCACGCTGGAAACCTTCCCCGACCTGTTTTGTCTGCCGCTCGGCGAATCCTT

#### *Fig.5(c)*

- S A L T V S E H V S Y V V T N Q Y L I K 1981 CTCCGCGCTAACCGTCTCCGAACACGTCAGTTATGTCGTAACAAACCAGTACCTGATCAA
- G I S Y P V S T T V V G Q S L I I T Q T 2041AGGTATCTCCTACCCTGTCTCCACCACCGTCGTAGGCCAGAGCCTCATCATCACCCAAAC
- A L N I S L E N C A F C Q S A L L E Y D 2161 GGCGCTCAACATTCACTAGAAAACTGCGCCTTTTGCCAAAGCGCCCTGCTAGAATACGA
- D T Q G V I N I.M Y M H D S D D V L F A 2221 CGACACGCAAGGCGTCATCAACATCATGTACATGCACGACTCGGACGACGTCCTTTTCGC
- L D P Y N E V V V S S P R T H Y L M L L 2281 CCTGGATCCTACAACGAAGTGGTGGTCTCATCTCCGCGAACTCACTACCTCATGCTTTT
- K N G T V L E V T D V V V D A T D S R L 2341 GAAAAACGGTACGGTCCTAGAAGTAACTGACGTCGTCGTCGGACGCCACCGACAGTCGTCT
- L K T C 2461 GCTCAAGACATGCTGACTGTAGAACCTGACAGTTTATGAGAAAAGGGACAGAAAAGTTAA
- 2521 AGACATTCACACAAAATCTTCTAAAACGGTACGGGCCCCAATACTTAGGGGCACTCTTGC
- 2581 TCGTTGTAATAAAGTACACGCCACACGGTGTGATGGTACTATATGCGTGAGGTCTGTGCG
- 2641 TCTTTATTTACGAGGTACTGTTATGGGTCTGGTTACATATCGGGCCCTGGATACAAGCTT